

### **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

### **Listing of Claims:**

1.- **(Currently Amended)** A method for measuring interference power in a time slot code division multiple access system, comprising:

A. performing channel estimation for received signals with channel estimation codes, to obtain ~~the original channel response estimation results  $\underline{h}_i, i=1 \cdots P$ , which are channel response results of all possible user terminals in the current cell, i.e., the original channel response estimation results  $\underline{h}_i, i=1 \cdots P$ , wherein P is the total length of the channel estimation windows;~~

B. predetermining a threshold of number of taps  $W_1$ , and selecting channel response estimation results corresponding to  $W_1$  taps with less power from the original channel response estimation results  $\underline{h}_i$  according to the threshold of number of taps  $W_1$  as a roughly estimated result of the interference power; and

C. performing threshold processing on the original channel response estimation results with a signal-to-noise ratio threshold post-processing method by using the roughly estimated result of the interference power and a predetermined signal-to-noise ratio threshold, to obtain an accurate measured result of the interference power;

wherein said threshold of number of taps  $W_1$  is in a range of 50 to 90.

2. (Original) A method for measuring interference power in a time slot code division multiple access system according to claim 1, wherein said threshold of number of taps  $W_1$  is less than the number of taps of the actual interference responses available.

3. (Cancelled)

4. **(Currently Amended)** A method for measuring interference power in a time slot code division multiple access system according to claim 3~~1~~, wherein said threshold of number of taps  $W_1$  is 80.

5. (Original) A method for measuring interference power in a time slot code division multiple access system according to claim 1, wherein in step B, the roughly estimated result of the interference power  $\sigma_{n1}^2$  is obtained with equation  $\sigma_{n1}^2 = \frac{P}{D \cdot W_1} \sum_{i=1}^P |h'_i|^2$ , wherein  $\underline{h}'_i$  is the channel response estimation results for  $W_1$  taps, and D is the noise degradation factor of the corresponding channel estimation code.

6.- (Original) A method for measuring interference power in a time slot code division multiple access system according to claim 1, wherein step C of performing threshold processing on the original channel response estimation results with the signal-to-noise ratio threshold post-processing method further comprises:

C1. obtaining a compensated threshold of the interference power  $\Gamma_{CHE}$  with equation

$$\Gamma_{CHE} = \frac{\sigma_{n1}^2 \varepsilon_{CHE}}{P\beta}$$

according to the predetermined signal-to-noise ratio threshold  $\varepsilon_{CHE}$ , the

compensation value  $\beta$ , and the roughly estimated result of the interference power  $\sigma_{n1}^2$ ;

C2. selecting channel response estimation results corresponding to  $W_2$  taps with the power lower than the threshold of the interference power  $\Gamma_{CHE}$  from the original channel response estimation results as the interference response results  $\underline{h}''_i$  of the signal-to-noise ratio threshold post-processing;

C3. obtaining the accurate measured value of the interference power with equation

$$\sigma_n^2 = \frac{P}{D \cdot W_2} \sum_{i=1}^P |h''_i|^2$$

, wherein D is the noise degradation factor of the corresponding channel estimation code.

7. (Original) A method for measuring interference power in a time slot code division multiple access system according to claim 6, wherein said signal-to-noise ratio threshold  $\varepsilon_{CHE}$  is in a range of 3 to 5, and wherein said compensation value  $\beta$  is provided for the lower roughly estimated result of the interference power and is in a range of 0.30 to 0.60.

8. (Original) A method for measuring interference power in a time slot code division multiple access system according to claim 7, wherein said signal-to-noise ratio threshold  $\varepsilon_{CHE}$  is 4, and said compensation value  $\beta$  is 0.41.